

CLAIM AMENDMENTS

Claims 1-244 (canceled)

245. (currently amended) A composition comprising ~~a primary nucleic acid~~ a primary nucleic acid construct, which upon introduction into a eukaryotic cell ~~synthesizes~~ acts as a template for the synthesis of a secondary nucleic acid which ~~synthesizes~~ acts as a template for the synthesis of a gene product, selected from the group consisting of a sense and antisense nucleic acid or a tertiary nucleic acid, or both, in said eukaryotic cell, wherein said primary nucleic acid is not obtained with said secondary ~~or tertiary nucleic acid~~ or said gene product and wherein said composition further comprises a signal sequence.

Claims 246-247 (canceled)

248. (previously presented) The composition of claim 245, wherein said primary nucleic acid is single-stranded, double-stranded or partially double-stranded.

249. (previously presented) The composition of claim 245, wherein said primary nucleic acid is selected from the group consisting of DNA, RNA and nucleic acid analogs, and a combination thereof.

250. (previously presented) The composition of claim 249, wherein said DNA, RNA or both are modified.

251. (currently amended) The composition of claim 245, wherein said secondary nucleic acid ~~or said tertiary nucleic acid~~ is selected from the group consisting of DNA, RNA, a DNA-RNA hybrid, a DNA-RNA chimera and a combination of the foregoing.

252. (canceled)

253. (currently amended) The composition of claim ~~252~~245, wherein said signal processing sequence is selected from the group consisting of a promoter, an initiator, a terminator, an intron, a cellular localization element and a combination of the foregoing.

254. (currently amended) The composition of claim ~~252~~245, wherein said signal processing sequence is contained in an element selected from the group consisting of said primary nucleic acid, said secondary nucleic acid, said gene product, ~~said tertiary nucleic acid~~ and a combination of the foregoing.

255. (previously presented) The composition of claim 245, wherein said gene product is single-stranded.

Claims 256-259 (canceled)

260. (previously presented) A eukaryotic cell containing the composition of claim 245.

Claim 261-263 (canceled)

264. (currently amended) A ~~secondary or tertiary~~ nucleic acid or gene product produced from the composition of claim 245.

265. (currently amended) ~~A composition of matter comprising a~~ A nucleic acid component construct which when present in a cell produces ~~acts as a template for the synthesis of a nucleic acid comprising a gene product from an snRNA promoter, which gene product comprises~~ (i) a nuclear localization sequence comprising a portion of snRNA, said portion of snRNA comprising sequences for (a) at least two stem loops present at the 3' end of native snRNA, and (b) a reimportation signal and ~~(ii) an antisense or sense nucleic acid.~~

Claims 266-267 (canceled)

268. (currently amended) The ~~composition~~nucleic acid construct of claim 265, wherein said ~~sense or~~ antisense nucleic acid (ii) is selected from the group consisting of DNA, RNA, a DNA-RNA hybrid, a DNA-RNA chimera, and a combination of the foregoing.

Claim 269 (canceled)

270. (currently amended) The ~~composition~~nucleic acid construct of claim 265, wherein said nuclear localized sequence comprises a portion of U1 RNA comprising C and D loops.

Claim 271 (canceled)

272. (currently amended) The ~~composition~~nucleic acid construct of claim 265, wherein said gene product is single-stranded.

Claims 273-283 (canceled)

284. (currently amended) A cell containing the ~~composition~~nucleic acid construct of claim 265.

Claims 285-287 (canceled)

288. (previously presented) A biological system containing the cell of claim 284.

289. (previously presented) The biological system of claim 288, wherein said system is selected from the group consisting of an organism, an organ, a tissue, a culture and a combination thereof.

290. (currently amended) A process for localizing a gene product in a eukaryotic cell, comprising:

- (a) providing the ~~composition~~nucleic acid construct of claim 265 and
- (b) introducing said composition into said cell *ex vivo*.

Claims 291-295 (canceled)

296. (currently amended) The process of claim 290, wherein the ~~composition~~nucleic acid construct comprises U1 or U2 or both.

Claims 297-298 (canceled)

299. (currently amended) A ~~nucleic acid~~multi-cassette nucleic acid construct comprising either more than one promoter or one initiator or both, which upon introduction into a eukaryotic cell produces more than one specific nucleic acid, each such specific nucleic acid so produced being substantially nonhomologous with each other and being either complementary with a specific portion of one or more messenger~~-viral or cellular~~ RNA targets in a cell or binds to a specific protein in a cell.viral or cellular -protein.

Claims 300-302 (canceled)

303. (currently amended) The ~~nucleic acid~~nucleic acid construct of claim 299, wherein said nucleic acid in said construct is selected from DNA, RNA, nucleic acid analogs and a combination thereof.

304.(currently amended) The nucleic acid -construct~~nucleic acid~~ of claim 303, wherein said DNA or RNA in said construct is modified.

Claims 305-307 (canceled)

308. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 307~~299~~, wherein said complementary specific nucleic acid sequence ~~products~~produced act as antisense.

309. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 307~~299~~, wherein said cellular protein comprises a localizing protein or a decoy protein.

310. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 309, wherein said localizing protein comprises a nuclear localizing protein or a cytoplasmic localizing protein.

311. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 309, wherein said decoy protein binds a protein required for viral assembly or viral replication.

312. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 299, wherein said specific nucleic acid ~~products~~produced ~~are~~is selected from antisense RNA, antisense DNA, a ribozyme, a protein binding nucleic acid sequence, and a combination of the foregoing.

313. (currently amended) The ~~nucleic acid construct~~nucleic acid of claim 299, further comprising a means for delivering said nucleic acid to ~~a cell containing the gene or the specific protein of interest.~~said eukaryotic cell.

Claims 314-316 (canceled)

317. (currently amended) The ~~composition~~nucleic acid construct of claim 245, wherein said secondary nucleic acid is DNA and said tertiary nucleic acid is RNA.

318. (withdrawn-currently amended) A process for introducing a gene product into a cell comprising

(a) providing the ~~composition~~nucleic acid construct of claim 245 and

(b) administering said ~~composition~~nucleic acid construct.

319. (withdrawn-currently amended) The method according to claim 318 wherein said ~~composition~~nucleic acid construct is administered *ex vivo*.

320. (withdrawn-currently amended) The method according to claim 318, wherein said ~~composition~~nucleic acid construct is administered *in vivo*.

321. (withdrawn-currently amended) A process for introducing a plurality of nucleic acid sequences into a cell comprising:

(a) providing the ~~nucleic acid~~nucleic acid construct of claim 299 and

(b) administering said ~~nucleic acid~~nucleic acid construct.

322. (withdrawn-currently amended) The method according to claim 321, wherein said ~~component~~nucleic acid construct is administered *ex vivo*.

323. (withdrawn-currently amended) The method according to claim 318, wherein said ~~component~~nucleic acid construct is administered *in vivo*.